

CLAIMS:

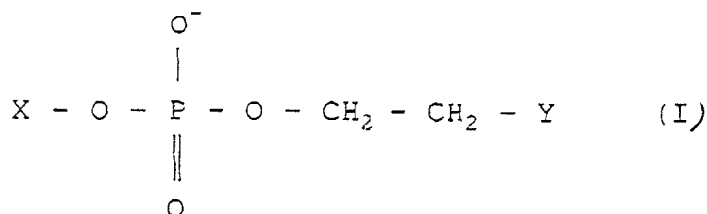
1. A method for the treatment or prevention of tissue damage in a subject having an inflammatory and/or tissue damaging condition, which comprises administering to the subject an effective amount of a compound capable of inhibiting the binding of C-reactive protein (CRP) to an autologous or extrinsic ligand thereof.
2. A method according to claim 1, wherein the inflammatory and/or tissue damaging condition comprises atherosclerosis.
3. A method according to claim 1, wherein the inflammatory and/or tissue damaging condition is selected from an infection, an allergic complication of infection, an inflammatory disease, ischemic or other necrosis, traumatic tissue damage and malignant neoplasia.
4. A method according to claim 3, wherein the condition is an infection selected from a bacterial infection, a viral infection, and a parasitic infection.
5. A method according to claim 3, wherein the condition is an allergic complication of infection selected from rheumatic fever, glomerulonephritis, and erythema nodosum leprosum.
6. A method according to claim 3, wherein the condition is an inflammatory disease selected from Rheumatoid arthritis, Juvenile chronic (rheumatoid) arthritis, Ankylosing spondylitis, Psoriatic arthritis, Systemic vasculitis, Polymyalgia rheumatica, Reiter's disease, Crohn's disease and Familial Mediterranean fever.

7. A method according to claim 3, wherein the condition is tissue necrosis selected from Myocardial infarction, Tumour embolization and Acute pancreatitis.

8. A method according to claim 3, wherein the condition is trauma selected from elective surgery, burns, chemical injury, fractures and compression injury.

9. A method according to claim 3, wherein the condition is malignant neoplasia selected from Lymphoma, Hodgkin's disease, Carcinoma and Sarcoma.

10. A method for the treatment or prevention of tissue damage in a subject having an inflammatory and/or tissue damaging condition, which comprises administering to the subject an effective amount of a compound of general formula (I):



wherein X is H or an organic substituent group, and Y is N substituted to form ammonium.

11. A method according to claim 10, wherein X is H or C₁ to C₂₀ alkyl.

12. A method according to claim 11, wherein X is C₁₂ to C₂₀ alkyl

13. A method according to claim 10, wherein Y is N-R₃, in which each R is independently selected from C₁ to C₅ alkyl.

14. A method according to claim 13, wherein each R is CH_3 .

15. A method for the treatment or prevention of tissue damage in a subject having an inflammatory/tissue damaging condition, which comprises administering to the subject an effective amount of a compound comprising hexadecylphosphocholine.

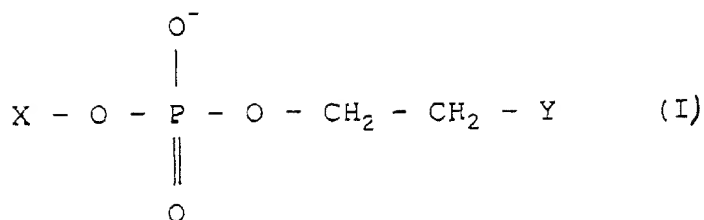
16. A method for the treatment or prevention of atherosclerosis in a subject which comprises administering to the subject an effective amount of a compound capable of inhibiting binding of C-reactive protein (CRP) to an autologous or extrinsic ligand thereof.

17. A method for the treatment or prevention of tissue damage in a subject having a myocardial infarction, which comprises administering to the subject an effective amount of a compound capable of inhibiting binding of C-reactive protein (CRP) to its autologous or extrinsic ligand thereof at or after the onset of the infarction.

18. A method for the treatment or prevention of a thrombotic complication of atherosclerosis in a subject which comprises administering to the subject an effective amount of a compound capable of inhibiting binding of C-reactive protein (CRP) to an autologous or extrinsic ligand thereof.

19. A method according to any one of claims 1, 10, 15, 16, 17 or 18, wherein the subject is a human subject.

20. A method according to any one of claims 16 to 18, wherein the compound capable of inhibiting the binding of CRP to an autologous or extrinsic ligand thereof has the general formula (I):



wherein X is H or an organic substituent group, and Y is N substituted to form ammonium.

21. A method according to claim 20, wherein X is H or C₁ to C₂₀ alkyl.

22. A method according to claim 21, wherein X is C₁₂ to C₂₀ alkyl.

23. A method according to claim 20, wherein Y is N-R₃, in which each R is independently selected from C₁ to C₅ alkyl.

24. A method according to claim 23, wherein each R is CH₃.

25. A method for the treatment or prevention of tissue damage in a subject with myocardial infarction, which comprises administering to the subject an effective amount of a compound comprising hexadecylphosphocholine.

26. A method for selecting a pharmaceutical compound for treating or preventing tissue damage in a subject having an inflammatory and/or tissue damaging condition, which comprises contacting C-reactive protein (CRP) with a ligand thereof under conditions to permit CRP ligand binding, in the presence of a test compound; and selecting the test

compound as the pharmaceutical compound if the test compound inhibits binding of CRP to the ligand.

27. A method according to claim 26, wherein a first component comprising one of CRP or the ligand thereof is present as part of a solid phase, which is contacted with a second component comprising the other as part of a liquid phase; and the step of testing for CRP ligand binding comprises detecting binding of the second component to the solid phase.

28. A method according to claim 27, wherein the solid phase comprises the first component attached to a solid support.

29. A method according to claim 28, wherein the solid support comprises a particulate support or a solid surface.

30. A method according to claim 29, wherein the solid support comprises a solid surface comprising an interior surface of a container.

31. A method according to claim 27, wherein the step of testing for CRP ligand binding further comprises washing the solid phase to remove unbound material.

32. A method according to claim 27, wherein the second component is labelled with a detectable label.

33. A method according to claim 32, wherein the detectable label comprises a radiolabel, a fluorochrome or an enzyme.

34. A method according to claim 27, wherein the binding of the second component to the solid phase is detected immunologically.

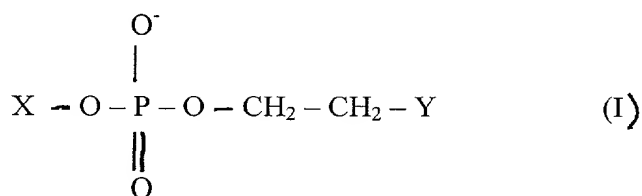
35. A method for selecting a pharmaceutical compound for treating or preventing tissue damage from a plurality of test compounds, which comprises providing an array of reaction zones and a plurality of test compounds, and selecting the pharmaceutical compound by performing the method of claim 26 in each reaction zone.

36. A method according to claim 35, wherein the array of reaction zones comprises an array of containers.

37. A method according to claim 36, wherein the array of containers comprises a microtitre plate well array.

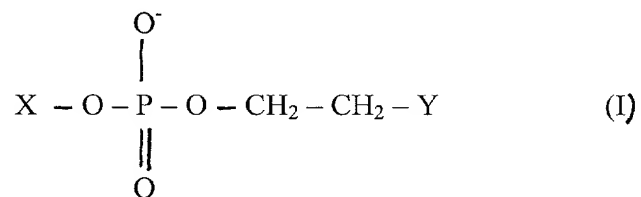
38. A process for the production of a pharmaceutical agent, which process comprises (i) identifying a pharmaceutical compound by selecting the compound according to the method of claim 26; and (ii) producing a pharmaceutical agent by providing the pharmaceutical compound or a pharmaceutically-acceptable derivative thereof.

39. The method of claim 1 wherein the compound is an antibody or fragment thereof that specifically binds C-reactive protein.
40. The method of claim 1 wherein the compound is a fragment of C-reactive protein or a fusion protein comprising a fragment of C-reactive protein.
41. The method of claim 39 wherein said antibody specifically binds the calcium-dependent binding site of C-reactive protein.
42. A method according to claim 10, wherein the subject is a human subject.
43. A method according to claim 15, wherein the subject is a human subject.
44. A method according to claim 16, wherein the subject is a human subject.
45. A method according to claim 17, wherein the subject is a human subject.
46. A method according to claim 18, wherein the subject is a human subject.
47. A method according to claim 17, wherein the compound capable of inhibiting the binding of CRP to an autologous or extrinsic ligand thereof has the general formula (I):



wherein X is H or an organic substituent group, and Y is N substituted to form ammonium.

48. A method according to claim 18, wherein the compound capable of inhibiting the binding of CRP to an autologous or extrinsic ligand thereof has the general formula (I):



wherein X is H or an organic substituent group, and Y is N substituted to form ammonium.